



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

D119-646-313
Job Sheet 169165



Part No: D119-646-313

Job Qty: 1 ea

Part Name: Skidtube Protector, LH



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 12/4/17

Job Tracking No:

Due Date: 12/15/17

Created By: Linda Lacelle

Type: SOLD

Description:

Customer: Agustawestland Philadelphia Corp (CAGUS02)

3050 Red Lion Road Philadelphia, PA, 19114 USA ph:(215) 281-1400 fx:(215) 281-0447.

Note: DWG REV B IPP REV:A 15.12.10 NEW ISSUE DD VERF:JLM IPP REV:B 17.05.10 AS PER DSI9734 REVB DD VERF:JFS

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	1 Ea		12/15/17	0.00	0.00	Start Up Stores/Pkg-1		
110	Packaging	1 pcs		12/15/17	0.00	0.00	Packaging1-1		
120	QC	1 pcs		12/15/17	0.00	0.00	QC4		Smb
125	DC	1 pcs		12/15/17	0.00	0.00	DC		AT
130	Packaging	1 pcs		12/15/17	0.00	0.00	Packaging3-1		Smb
140	QC21-FG	1 Ea		12/15/17	0.00	0.00	QC21		DEC 20 2017

Part Op 125 - Photocopy bluefile & type labels per PPP D119-646-313 CHG002
Descriptions: 130 - Identify and pack for shipping as per PPP D119-646-313 Location:

Job Allocations

Operation	Component Part	Required	Inventory	Allocated	Std Qty
90-Start up Operation	AN3-45A 5018789	4	31	0	0
	AN3-47A 5018788	6 30d/10t	22	0	0
	AN3-50A 5018784	6	20	0	0
	D3904-1 5018991	6	119	0	0
	D4506-3 5018783	6	31	0	0
	D5369-1 5018968	1	2	0	0
	D5371-1 50183585	1	1	0	0
	D5372-1 5018780	1	3	0	0
	D5374-1 5007449	6 x2	9	0	0
	D5374-3 5011149	8	15 502350X	0	0
	D5376-1	1	0	0	0
	MS21042L3 5018775	10	4,687	0	0
	NAS1149D0316J 5018772	4	961	0	0
	NAS1149D0332J 5021087	18	1,679	0	0

Part Specifications

Specifications could not be found.

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%;"> <tr> <td style="width:25%;">Skid-tube ☐</td> <td style="width:25%;">Cross tube ☐</td> <td style="width:25%;">Water Jet ☐</td> <td style="width:25%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>			Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Large Fab ☐	Composite ☐	Supplier ☐																		
Date : _____	Step #: _____	QTY Effective : _____	MRB (QSI042) Approval																	
Description Work Order Deviation		Disposition																		
		Dart Aerospace Ltd. 1270 Aberdeen Street Hawkesbury, ON K6A 1K7 CANADA TEL.: 1 613 632-5200 Email: sales@dartaero.com www.dartaerospace.com																		
		Completed By																		
		Lead hand / Supervisor Approval Verification																		
		QC / QA Coordinator Approval																		

 S025351 Skidtube Protector, LH PART NO: Revision: Operation: Change No:	D119-646-313 Start up Operation Mfg Date: 12/20/17 Job No: 169165
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Root Cause <table style="width:100%;"> <tr> <td style="width:50%;">Environment ☐</td> <td style="width:50%;">No Re-verif. ☐</td> </tr> <tr> <td>Design ☐</td> <td>Operator ☐</td> </tr> <tr> <td>Doc/Data ☐</td> <td>Offset/Setup ☐</td> </tr> <tr> <td>Equip/Tooling ☐</td> <td>Supplier ☐</td> </tr> <tr> <td>Handling/Pre ☐</td> <td>Training ☐</td> </tr> <tr> <td>Material ☐</td> <td>Use for Testing ☐</td> </tr> <tr> <td>Internal Transport ☐</td> <td>Poor Information ☐</td> </tr> <tr> <td>Tribal Knowledge ☐</td> <td>Rushing ☐</td> </tr> <tr> <td>LOA ☐</td> <td>Product Improvement ☐</td> </tr> <tr> <td>Substation ☐</td> <td>Process Improvement ☐</td> </tr> <tr> <td>Past Expiry Date ☐</td> <td>Manufacturing Process ☐</td> </tr> <tr> <td>Misidentified ☐</td> <td>Past Due ☐</td> </tr> </table>	Environment ☐	No Re-verif. ☐	Design ☐	Operator ☐	Doc/Data ☐	Offset/Setup ☐	Equip/Tooling ☐	Supplier ☐	Handling/Pre ☐	Training ☐	Material ☐	Use for Testing ☐	Internal Transport ☐	Poor Information ☐	Tribal Knowledge ☐	Rushing ☐	LOA ☐	Product Improvement ☐	Substation ☐	Process Improvement ☐	Past Expiry Date ☐	Manufacturing Process ☐	Misidentified ☐	Past Due ☐	<table style="width:100%;"> <tr><td>☐</td><td>Positioned Wrong</td></tr> <tr><td>☐</td><td>Outside Dimensions</td></tr> <tr><td>☐</td><td>Over/Under tolerance</td></tr> <tr><td>☐</td><td>Part Incorrect</td></tr> <tr><td>☐</td><td>Part Lost/Missing</td></tr> <tr><td>☐</td><td>Part Moved</td></tr> <tr><td>☐</td><td>Drawing</td></tr> <tr><td>☐</td><td>Finish</td></tr> <tr><td>☐</td><td>Misread</td></tr> <tr><td>☐</td><td>Turning Sequence</td></tr> </table>	☐	Positioned Wrong	☐	Outside Dimensions	☐	Over/Under tolerance	☐	Part Incorrect	☐	Part Lost/Missing	☐	Part Moved	☐	Drawing	☐	Finish	☐	Misread	☐	Turning Sequence
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10.0 PARTS LIST:

REFERENCE ONLY

Qty. -313	Qty. -314	PART NUMBER	DESCRIPTION
X		D119-646-313	SKIDTUBE PROTECTOR, LH
	X	D119-646-314	SKIDTUBE PROTECTOR, RH
6	6	D3904-1	WASHER
6	6	D4506-3	WASHER
1		D5369-1	CABLE GUARD, LH
	1	D5369-2	CABLE GUARD, RH
1		D5371-1	HOOK, LH
	1	D5371-2	HOOK, RH
1	1	D5372-1	PLUG
6	6	D5374-1	BUSHING
8	8	D5374-3	BUSHING
1	1	D5376-1	DRILLING JIG
4	4	AN3-45A	BOLT
6	6	AN3-47A	BOLT
6	6	AN3-50A	BOLT
18	18	NAS1149D0332J	WASHER
4	4	NAS1149D0316J	WASHER
10	10	MS21042L3	NUT

11.0 WEIGHT AND BALANCE

The following weight and balance changes are applicable:

Installation	Weight	LONGITUDINAL		LATERAL	
		Arm	Moment	Arm	Moment
D119-646-313 SKIDTUBE PROTECTOR, LH ON STANDARD SKIDTUBE	4.3 lb 1.95 kg	108.1 in 4.3 m	465 in-lb 8.4 kg-m	-43.4 in 1.7 m	-187 in-lb -3.3 kg-m
D119-646-314 SKIDTUBE PROTECTOR, RH ON STANDARD SKIDTUBE	4.3 lb 1.95 kg	108.1 in 4.30 m	465 in-lb 8.4 kg-m	43.4 in 1.7 m	187 in-lb 3.3 kg-m
△ D119-646-313 SKIDTUBE PROTECTOR, LH ON FLOAT SKIDTUBE	1.6 lb 0.72 kg	133.3 in 3.38 m	213 in-lb 2.4 kg-m	-43.4 in -1.7 in	69 in-lb 1.2 kg-in
△ D119-646-314 SKIDTUBE PROTECTOR, RH ON FLOAT SKIDTUBE	1.6 lb 0.72 kg	133.3 in 3.38 m	213 in-lb 2.4 kg-m	43.4 in 1.7 in	69 in-lb 1.2 kg-in

APPROVED

DESIGN	RF	DART AEROSPACE USA, INC. EUGENE, OR	
DRAWN	VS		
CHECKED	MB	DRAWING NO.	REV. C
MFG. APPR.	N/A	DSI 9734	SHEET 8 OF 15
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	SKIDTUBE PROTECTOR KIT	NTS
DATE	17.06.27	COPYRIGHT © 2015 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

Change Record

PAGE 1 OF 1

Part Number: D119-646-313/-314

Description: SKIDTUBE PROTECTOR, LH/RH

[illegible]